

5 I claim:

1. A modeling compound comprising, in combination,
 - resin;
 - primary plasticizer;
 - stabilizer;
 - 10 microspheres; and
 - rheology modifier.
2. A modeling compound as in claim 1 where said resin comprises polyvinyl chloride.
3. A modeling compound as in claim 1 where said primary plasticizer comprises a monomeric plasticizer.
4. A modeling compound as in claim 1 where said primary plasticizer comprises a polymeric plasticizer.
5. A modeling compound as in claim 1 where said stabilizer comprises metal ion which complexes with HCL.
6. A modeling compound as in claim 1 where said microspheres comprise dry expanded polymer shells which encapsulate a gas.
7. A modeling compound as in claim 1 where said rheology modifier comprises a thixotropic agent.
8. A modeling compound as in claim 1 further comprising a secondary plasticizer.
9. A modeling compound comprising, in combination,
 - 40% - 60% polyvinyl chloride by weight of the compound;
 - 20% - 25% primary plasticizer by weight of the compound;
 - 1% - 3% secondary plasticizer by weight of the compound;
 - 1% - 2% stabilizer by weight of the compound;
 - 30 15% - 25% microspheres by weight of the compound; and
 - 1% - 3% thixotropic agent by weight of the compound.
10. A modeling compound as in claim 9 where said polyvinyl chloride comprises 48.8% by weight of the compound.
11. A modeling compound as in claim 9 where said primary plasticizer comprises a monomeric plasticizer.

- 5 12. A modeling compound as in claim 9 where said primary plasticizer comprises
a polymeric plasticizer.
13. A modeling compound as in claim 9 where said primary plasticizer comprises
20.7% by weight of the compound.
14. A modeling compound as in claim 9 where said secondary plasticizer
10 comprises 1.2% by weight of the compound.
15. A modeling compound as in claim 9 where said stabilizer comprises metal ion
which complexes with HCL.
16. A modeling compound as in claim 9 where said stabilizer comprises 1.2% by
weight of the compound.
17. A modeling compound as in claim 9 where said microspheres comprise dry
15 expanded polymer shells which encapsulate a gas.
18. A modeling compound as in claim 9 where said microspheres comprise 26.4%
by weight of the compound.
19. A modeling compound as in claim 9 where said thixotropic agent comprises
20 1.8% by weight of the compound.
20. A process for forming a modeling compound, comprising,
 mixing a resin, a primary plasticizer, a secondary plasticizer and a
 stabilizer to a smooth liquid consistency to create a mixture;
 adding and mixing microspheres to said mixture after said smooth liquid
25 consistency is achieved; and
 adding rheology modifier after said microspheres are mixed with said
 mixture.
21. A process for forming a modeling compound as in claim 20 where said resin
comprises polyvinyl chloride.
- 30 22. A process for forming a modeling compound as in claim 20 where said
primary plasticizer comprises a monomeric plasticizer.
23. A process for forming a modeling compound as in claim 20 where said
primary plasticizer comprises a polymeric plasticizer.
24. A process for forming a modeling compound as in claim 20 where said
35 stabilizer comprises metal ions which complex with HCL.

- 5 25. A process for forming a modeling compound as in claim 20 where said rheology modifier comprises a thixotropic agent.
- 26. A process for forming a modeling compound as in claim 21 where said polyvinyl chloride comprises 40% - 60% by weight of the compound.
- 27. A process for forming a modeling compound as in claim 20 where said
10 primary plasticizer comprises 20% - 25% by weight of the compound.
- 28. A process for forming a modeling compound as in claim 20 where said secondary plasticizer comprises 1% - 3% by weight of the compound.
- 29. A process for forming a modeling compound as in claim 24 where said stabilizer comprises 1% - 2% by weight of the compound.
- 15 30. A process for forming a modeling compound as in claim 25 where said thixotropic agent comprises 1% - 3% by weight of the compound.